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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,704	02/26/2002	Gabor Devenyi	01W120	6376

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EXAMINER

HANSEN, COLBY M

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,704

Applicant(s)

DEVENYI, GABOR

Examiner

Colby Hansen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-15 and 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9, 10, 12-13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beery et al (US Pat. 3,654,816) in view of Devenyi (US Pat. 5,636,549).

Beery et al (US Pat. 3,654,816) discloses a leadscrew assembly comprising:

A leadscrew 16 comprising:

a cylindrical elongated shaft having an outer lateral surface and a rotational axis, and

a leadscrew thread;

a hollow drive nut housing 30 comprising:

a nut bore having an unthreaded inner surface with the leadscrew being inserted through the nut bore, the nut bore being sized such that the leadscrew may rotate therein about the rotational axis, and

a spring pin 10 affixed to the drive nut housing and spanning across the nut bore to engage the leadscrew thread;

the spring pin has a first end, a central portion, and a second end, and wherein the first end and the second end are each affixed to the drive nut housing;

the first spring pin retainer 24 and the second spring pin retainer 26 each comprise openings in the drive nut housing;

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a motor 64 that rotationally drives the leadscrew;

and a linear slide mechanism 22 to which the drive nut housing is engaged.

However Beery et al (US Pat. 3,654,816) does not disclose the leadscrew comprising thread wire helically wrapped in spaced-apart turn upon the lateral surface and affixed to the elongated shaft.

Devenyi (US Pat. 5,636,549) discloses, with regard to claim 1, a leadscrew comprising an elongated shaft having an outer lateral surface and a rotational axis, and a leadscrew thread comprising a thread wire helically wrapped in spaced-apart turns upon the lateral surface and affixed to the elongated shaft.

Regarding claim 2, Devenyi (US Pat. 5,636,549) discloses a spacer wire having a size smaller than that of the thread wire and helically interwrapped about the elongated shaft with the thread wire.

Regarding claim 4, Devenyi (US Pat. 5,636,549) discloses a thread wire that has a circular cross section.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the helical wire thread of Devenyi (US Pat. 5,636,549) within Beery et al. so as to form a hard, smooth thread comprising a wear-resistant running surface for engagement with a bearing nut member as suggested by Devenyi (US Pat. 5,636,549).

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Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beery et al. in view of Devenyi (US Pat. 5,636,549), as applied to claims 1-7, 9, 10, 12-13, and 16 above, further in view of Devenyi (US Pat. 5,533,417).

Beery et al. discloses the claimed invention except for the drive nut housing having an access opening therethrough.

Devenyi (US Pat. 5,533,417) discloses a drive nut housing having an access opening therethrough (fig. 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the drive nut housing opening of Devenyi (US Pat. 5,533,417) within Beery et al. so as to form a housing that is cheaper to produce with an access open that allows for assembly of internal components that is easier, as suggested by Devenyi (US Pat. 5,533,417).

Claims 11, 17, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beery et al. in view of Devenyi (US Pat. 5,636,549), as applied to claims 1-7, 9, 10, 12-13, and 16 above, further in view of Pan (US Pat. 6,459,844).

Beery et al. discloses the claimed invention except for an optical filter supported on the linear slide mechanism.

Pan discloses an optical filter supported on a linear slide apparatus.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the optical filter mechanism of Pan within Beery et al. so as

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to sustain an accurate positioning of a slide assembly over a substantial time, as suggested by Pan.

Response to Arguments

Applicant's arguments filed 12/11/2003 have been fully considered but they are not persuasive.

Applicant argues that Beery et al. discloses only an unidirectional motor wherein movement of the nut member is actuated by the motor in one direction and manually in the other. Examiner would agree, but there are no limitations within applicants' claims that define over such a feature. Furthermore, were the unidirectional nature of the motor defined over by applicant, it could be deemed obvious to use the background art of Beery et al. which described a bi-directional motor configuration, so as to have a more robust means of actuating the nut.

Applicant argues that the combination of Beery et al. and Devenyi is improper as the reasonable expectation of success in the combination is unsatisfactory. Examiner disagrees for the use of the wire threads of Devenyi would not destroy the Beery et al. references as the threads would still allow for linear actuation by motor and manual means while at the same time giving the screw of Beery et al. a hard, smooth thread comprising a wear-resistant running surface for engagement with a bearing nut member, which was suggested by Devenyi, thereby serving as motivation for the combination, and rendering erroneous any claims of hindsight reasoning.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so

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long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant argues that Beery et al. does not disclose “a linear slide mechanism to which the drive nut housing is affixed so that the drive nut housing does not rotate”. Examiner disagrees, for the linear slide mechanism of Beery et al. does fulfill said limitation for most the movement of the housing, only allowing rotation at specified locations and instances (col. 2/lines 34-38). Thus as broadly recited, the aforementioned limitation is fulfilled.

Applicant argues that incorporating an access opening would not make assembly easier. Examiner disagrees, not only would access allow for easier manipulation of internal components with a larger variety of tools, but it would allow for quality control such that component may be monitored for proper interaction, as well allowing for easier maintenance with cleaning and lubrication.

Applicant argue that the use of the Pan optical sensor would not work within Beery et al. because Beery et al. does not conform to the method of operation of said optical sensor that Pan does. The method of use of the optical sensor of Pan has little or no bearing on its proper incorporation within Beery et al. as the sensor is the only structure of Pan being used to modify Beery et al. (not its surrounding actuation structure). The sensor would function successfully within Beery et al., allowing for accurate positioning of the housing, and would therefore be proper.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(703) 305-3597**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence **not** permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 305-3597) on _____

(Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colby Hansen whose telephone number is (703) 305-1036. The examiner can normally be reached on Monday through Thursday and every other Friday from 7:30 PM to 5:00 PM (EST).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci, can be reached on (703) 308-3668. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

Colby M. Hansen

Patent Examiner



3/8/04



3/8/04
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SUPERVISORY PATENT EXAMINER
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